Purdue REU Program in Materials Processing

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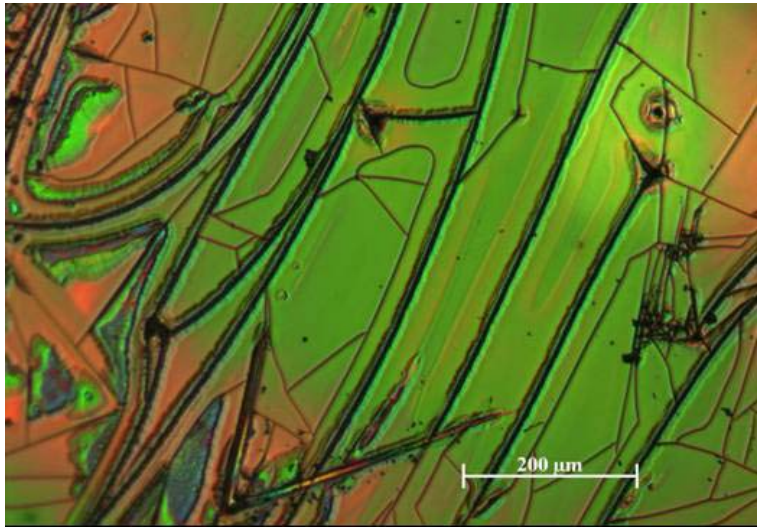
The purpose of the REU program, to introduce students to a hands-on research experience, resulted in every participating student stating that the experience had enhanced his or her understanding about the graduate school environment.

Over the five years of the program, most students completing their bachelor degree studies had accepted offers for graduate school in science or engineering fields at Universities such as Purdue, U.C. Berkeley, and Northwestern.

Students worked directly with faculty on small-scale research projects, from photonic nanowire fabrication to conductive epitaxial oxides to alloyed film deposition.
Every student's webpage can be found at **https://engineering.purdue.edu/MSE/REU**.



In one project, cracking in sol-gel BTO ceramic films (above) was fixed by altering precursor solution strength

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Education:

The REU students met as a group twice each week. During the course of the summer, each student gave three oral presentations: an introductory overview, a progress report, and a final seminar talk. Almost all students stated that this helped their communication skills.

The Purdue faculty gave tutorials on materials topics for students with less experience and training to understand the basis of their research project. Students also were able to meet informally at special social gatherings hosted by the faculty.

Outreach:

The 56 students participating over the last five years were drawn from 33 different institutions, many of which have no materials science program.

REU class of 2004